Podcast episode transcript: Michelle Badore and Patricia Saleeby, part 2

Michelle Badore: Welcome to the next installment of our Inside Angle podcast, where we welcome back our esteemed guest, Dr. Patricia Saleeby. Dr. Saleeby is a global health and disability leader, capability equity scholar, social worker act advocate, keynote speaker, department chair, and social work director.

I'm Michelle Badore, International Content Manager at Solventum. And today we are diving into the integrating ICF and SDOH and how functioning and social factors intersect in health.

So to appreciate how ICF and SDOH work together, it's important to grasp each framework's core concepts. ICF and SDOH were developed for different purposes, one as a classification of health and disability, the other as a public health concept highlighting social influences, but they converge on a common principle that is health and multidimensional.

So our audience here, you guys might be more familiar with SDOH, the wide array of social, economic and environmental factors that influence individual and group health.

Officially recognized in 2008 by WHO, where health inequalities often stem from unequal living conditions. In other words, where and how people live have a great effect on clinical outcomes. Dr. Saleeby, can you spend a few minutes explaining ICF, when it was created, and what it covers as far as the framework?

Patricia Saleeby: Absolutely. And thank you again, Michelle, for having me back. The World Health Organization, as you mentioned, created what's now known as the ICF, the International Classification of Functioning Disability and Health, started the process probably in the late 1990s.

And after several years of vetting it with countries around the world involving key stakeholders, so persons with disabilities, clinical professionals from across disciplines, policymakers, and representatives of non-governmental organizations, we were able to launch it and it was officially endorsed by the United Nations. in 2001. And at that time, it was, I think, 191, if I remember correctly, nations unanimously approving the ICF, which marked a shift away from how we look at health, how we look at disability, that we recognize that it is the individual and their functioning within the context of their environment.

So it represented this biopsychosocial approach to what we consider health, right? And a much more robust system, a dynamic and flexible system to account for the fact that everybody functions differently, that functioning can vary from day to day. We know this is very true, that whatever that health condition, and I say that very broadly, health condition, mental health condition, behavioral health condition, how it inter interacts with one's environment can make the difference, right?

In terms of what happens in that person's lived experience.

So even at that point, we were able to think about healthcare in a very different manner and create this classification that has body functions and structures to reflect what's going on in terms of that individual level.

They're functioning, so array of a activities and participation. and then the environment. So it very kind of innovative at the time and pre-seize, as you indicated, WHO's Commission on Social Determinants Health, but we're seeing this now discuss more and more and and it just makes sense whether you are talking about working with someone in the hospital, whether you're thinking about working with somebody in a school setting, in a community-based organization, everybody functions across different life areas. So the system and the classification makes sense.

Michelle Badore: I see. So it's a standard language to describe human functioning and it's universal meant for all people, not just those with disabilities that may emphasize what we're all experiencing, varying degrees of functioning over our lives.

Patricia Saleeby: Absolutely.

Michelle Badore: So when a health system or a program focuses on both ICF and SDoH how do they work in practice in tandem? I'm thinking about things like assessments or goal setting, care planning, those types of things.

Patricia Saleeby: So when I said that the United Nations approved the ICF well over several decades ago, we have not seen full implementation here in the United States, certainly not in a coordinated manner.

We have seen it in other countries, so we know it works, but we have seen it segmented in different areas.

So for example, to answer your question, we have a number of clinical assessments that have been used by clinical professionals for many years. We have been able to crosswalk many of those same assessments to the ICF.

So we know that we have a way that we can enable clinical professionals to continue to use those assessments, then have a way to be able to translate what they find to the appropriate ICF codes and with that also the environmental codes which would reflect social determinants of health and then be able to translate and communicate that information in things such as electronic health records and digital health solutions. Right now we have groups that are working. For example, there is a group that I'm involved with called PACIO which is an acronym that stands for post-acute care interoperability. It is this project where we're looking at how we can follow someone from, let's say, a hospital clinical setting through the discharge process into post-acute care.

When we do that, we know that it goes beyond just giving them a diagnostic code based on ICD, that at that point, the clinical professionals focus on functioning. So we have to have appropriate codes to be able to communicate that information so we can track progress. We can determine, as you mentioned, goal setting. What is the appropriate treatment or intervention plan for that individual and be able to monitor it accordingly?

Have those objectives been met? Has that care plan been placed and is it adequate to address not only their functioning in terms of progress, like in rehabilitation, but also what is needed to change in terms of their environment? And that's where we have the social determinants of health. And there is another group that's working on this called Gravity, specifically looking at what are those key social determinants of health that we keep seeing

reflected, let's say, in the evidence written in the literature, for example, that are being told by us by patients through their lived experiences.

We have been pulling them into, through the Gravity Project, into electronic health records. And now we are working on how we can make sure that they are also represented in terms of ICF coding and otherwise. So it's a multi multi-layered process involving hundreds and hundreds of people to make this actually happen. But I'm very confident and very optimistic that we will be able to see this come to fruition finally.

Michelle Badore: That's great that we're measuring outcomes so holistically. I'm thinking success is measured not only in the clinical terms like blood sugar levels or wound healing, but also in those functional and social terms.

Things like did the patient return to work or school? Has their quality of life improved? Are they engaging in the community more? These things, and I know you mentioned gravity, you know just talking about what is community, defining the term itself. Is it a geographical area? Is it something not so hard? Is it just like a sense of belonging? Those kinds of things we're talking about there.

These all are ICF aligned outcomes. But at the same time, tracking SDOH data like employment status or stable housing, income changes, Things like that can indicate if these social interventions are actually working. Many health systems now use the ICF codes and the ICD-10 Z codes in tandem. The ICF for the functional status and the Z codes for Z 55 through 65 to document things like homelessness or lack of social support. Both of those in the medical record. This dual documentation for lack of a better term ensures both aspects are visible and can be addressed.

I'm wondering if we have any real world examples from health systems illustrating maybe how these frameworks come together to improve care and outcomes.

Patricia Saleeby: Well, there are some examples. And that as I mentioned, because we don't have, let's say, a governmental mandate, right, that we actually use the ICF, certainly in this country, we're not seeing as much as we should, or we're not seeing it as formalized, but it's happening, right? We already know that we are tracking and capturing elements related to social determinants of health. Of course, the functioning information we have been capturing across clinical professions, that's social workers, occupational therapists, physical therapists, rehab professionals. It's just pulling it all together. And for years, what has happened is we have been faced with the fact that we don't have technology yet caught up, right, to reflect these qualifications and these codes.

This system, as I mentioned, is it being built by groups like PACIO and Gravity and others through FHIR, which is that fast healthcare care interoperability resources that back end to electronic health records and medical records and so forth. So very confident, as I mentioned, that we're going to be able to now put all the pieces together to make it happen. But programs, to answer your question, do exist. One that comes to mind, I was able to meet with a representative out of NYC Health and Hospital System. They have an amazing arts and medicine program. So when we think about arts, we might not necessarily think of it as a social determinant of health.

But it is, and it is something that also can kind of mitigate some of the health and mental health outcomes that we see with our patients. So right now, and it was something that I found out

was interesting, is that NYC Health and Hospital Systems, I mean, has this you know curated arts collection, I think it's the largest in New York City, which is pretty amazing. And that patients, family members, employees of the hospital system have access to this. And it has been meant intentionally as a mechanism now, drawing on that evidence that arts have this healing power to be an intervention, to be a tool that is meant to improve health and mental health and well-being. So it's something that we're trying to work with capturing, even in a greater sense, with appropriate codes.

If you think about the dates, we're at 25 years now of our anniversary or jubilee, if you will, of the ICF. And I'm very excited as the co-chair of the WHO Functioning Disability Reference Group to be able to say that we are looking into updating the ICF. So going to programs around the country, like the one I just mentioned, the Arts and Medicine Program at NYC Health and Hospital System, to be able to talk with them about what is working, what are some of the services and programs that they have in place that would fall under things like social determinants of health that would also be relevant to how we see improved health and functioning of individuals, and make sure that we are adequately capturing them, these factors in our coding and classification systems.

Michelle Badore: That's great. First, congratulations on that Jubilee for ICF. And I have a question about this arts program. This is fascinating. Is it visual arts? Does it include music also?

Patricia Saleeby: It does. It's a very robust, kind of wide-ranging project that recognizes arts in every sense of the word. So visual arts, literary arts, performance arts, they're able to have they have a number of programs beyond that arts collection sure that I mentioned, which they have curated. They have an exhibition program. They have an app a mobile application. We're able to look at the collection and learn more about the history, but they have artists in residence programs. It's just amazing throughout New York City. So the Bronx to Brooklyn to Queens, there's an amazing program. I'm thinking about music and memory program, for example, where they're able to have curated personalized playlists that are accessed on iPods they are given to patients with Alzheimer's disease, dementia, and other types of cognitive loss.

We know when looking at the evidence that music has been shown to reduce the need for medication, they help improve the well-being of patients and their relationships in terms of social support with family members.

So this is just one example of a program that they're doing, and they're collecting the evidence as well. Another great program, they have this kind of lullaby project with pregnant new mother and new mothers and fathers. And they, I think they match up individuals, parents, in and terms of writing personal lullabies for their children. And that we know helps to address some of the aspects around strengthening the bonds between the child and the parent. So just some really innovative stuff that is coming out of NYC Health and Hospital System Program, specifically around arts in health and arts in medicine.

Michelle Badore: That's so good. I could talk about this all day. Music is life for me. So going back to the ICF and climbing out of the rabbit hole we just went in, another recent example that I saw is like clinicians often document the symptoms of heat-related illnesses, but fail to assign X30, that ICD-10-CM code that is for exposure to excessive natural heat. So this leads to an undercount.

There was a recent *JAMA* article arguing that this undercoding creates a significant gap in the public health data, making it difficult to assess the true prevalence of heat stress, and that goes to justify public health investments and implementing effective preventative strategies.

So this is just an excellent example of where the limitation is in coding, but the patient's story is being documented. Can you tell me how maybe ICF would play into that example? Or is there information on temperature, environmental determinants of health in ICF?

Patricia Saleeby: Absolutely. So we have a variety of codes that would be very relevant. When we think about the ICF, again, we're talking about thousands and thousands of codes related to body functions and structures, daily activities and participation, and of course the environment.

So one code that comes to mind is we have one that's about sensitivity to temperature, for example. So that could cover any kind of sensory functions related to both heat and cold, right? So that would be very relevant and we would be able to capture that.

But in addition to that code, we have a bodily function code around maintaining your body temperature. So specific to...if you're able to maintain that optimal body temperature in light of changes in the environment and the environmental temperature. So related to what you're saying in terms of exposure to excessive heat or natural heat, right? So we're able to capture that.

And then in addition to being able to say, we have an ICD code, the X30 code, we have body function codes. We also have codes related to heat in the environment section. So temperature specific, which is I think E2250, being able to then document that it's about degree of heat or cold can be high, low temperature, normal, extreme, and so forth. Because remember, this is a system for everyone about their functioning, right? So we want to make it robust enough so that we can capture variations and nuances to what this means. So in the case that you just mentioned, we would use an E-2250 temperature code, saying that in that environment, there's excessive heat. And then we could add through the narrative component, right? Like in an electronic health record, what exactly is going on.

But I think with anything, we need to be able to show when we have something that has been addressed in terms of diagnosis and documented, what happens after that, right? What happens in terms of the effect and the consequences on someone's life in terms of their functioning, And what in the environment, certainly in this particular example, and it's a very good example, Michelle, what needs to be changed, right?

Are we able to change it, right? There are people, for example, that lack safe housing, and as a result, They're living in extreme heat circumstances because they don't have proper shelter, right? They don't have access to air conditioning. We know this happens to a lot of people in many countries, right? If not all countries.

So how do we then intervene? Because the intervention there is not a medical intervention that is needed. It is a health and social care intervention that is needed. And so by increasing the amount of codes that we're able to use to document, being able to create a system like we're doing through some of those projects I previously mentioned through the electronic health record, we're able to identify what actually needs to be changed. And in this case, it would be someone's perhaps environment to be able to help improve their health situation.

Michelle Badore: Yeah, great information. Yeah, I'm located here in Florida. So I'm thinking about those in, say, Miami, extreme heat, or the colleagues that I work with in the Middle East, extreme, way extreme heat.

This is great information and really applicable. Thank you. It really shows how this intersectional approach has multiple issues, disadvantages that can compound. Once there's more data available about this and getting this out there, especially in our country, we can get these factors built into our groupers and suites of preventable products that we have.

We're aware of so many impacts affecting so diverse numbers of clinical decisions. They can all be improved with the right preparation for the healthcare systems and for public health.

Anything else to add today? I just want to say has been a sincere pleasure working with you again.

Patricia Saleeby: Yes, thanks again for having me. One more thing that I would like to add, because I did mention environmental factors, is that the ICF framework recognizes another aspect contextually, that's personal factors. It was one of the things to your question, the first question I think that you asked about the development ICF,

We recognize that this was important. Someone's background, their age, their gender, their race, ethnicity, lifestyle, for example, also contribute to someone's health, mental health situation. But because of time constraints and resource constraints, we made the decision that we wouldn't necessarily be able to create an entire section on personal factors within the ICF classification.

We did the environment, and that was enough, right, to be able to tackle at that time. But we recognized that we still needed to tell people why it's important. So it is reflected when you look up the ICF framework, you'll see it there along with environmental factors, but note that we don't actually have codes assigned.

Another reason was because it's just so diverse that it's a wide range and a lot of variability. We wanted to make sure we were going to do it justice as they say. So we kind of put it on the back end and we were hoping that the next time we would do an iteration and update the ICF, and now it's been 25 years, here we are, that we would look at it again. So there is an opportunity. We have instruments like ICF checklists, for example, that recognize and will say that personal factors are important and allow space for a clinical provider or a family member, for example, or the patient themselves to be able to indicate what they think might be relevant as a factor that is impacting their health. So I just wanted to make sure I note that as well, because it would be the next steps that we're going to see, I think, is how we can expand the environmental section and also how we can look into better documenting personal factors.

Michelle Badore: That's great. Thanks for sharing those next steps. Also important. It's been a pleasure. Thank you again, Dr. Saleeby for joining us.

Patricia Saleeby: Thank you again, Michelle.